

Date: Thursday, 12/14/2006 3:39:38 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: STEM
Job Number	: 29964		
Estimate Number	: 10394		
P.O. Number	: N/A	Part Number	: D29681
This Issue	: 12/14/2006 S.O. No. : N/A	Drawing Number	: D2968
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : MACHINED PARTS	Drawing Revision	: B1
Previous Run	: 29836A	Material	: N/A
Written By	: <u>JF 06/12/15</u>	Due Date	: 1/5/2007
Checked & Approved By	: <u>JF 06/12/15</u>	Qty:	40 Um: Each
Comment	: Est:C 08.04.11 Reformat; Incorporated D2968-1/-5 KJ/RF		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M4130NR0750	4130 steel rod .750"
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Comment: Qty.: 0.4550 f(s)/Unit Total : 18.1986 f(s)

Material: AISI 4130 Ø 3/4 " Bar

(M4130N-R0.750)

Batch: M103090

Identify AS D2968-1

JF 07/01/06 (41)

2.0	HARDINGE	HARDINGE CNC LATHE SMALL
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Comment: HARDINGE CNC LATHE SMALL

1-Turn Blank as per Folio FA047 and Dwg D2968

2-Deburr, no sharp edges

JF 07/01/06 (41)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

JF 07/01/06 (41)

4.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

1- Machine as per Folio FA047 and Dwg D2968

2- Deburr

JF 07/03/12 (41)

5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

JF 07/03/12 (41)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: Q Date: 07/03/19
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 12/14/2006 3:39:38 PM
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEM

Job Number: 29964

Part Number: D29681

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

2nd 07/03/13

41

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

CP 04/13/15 (41) CD

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

2nd 07/03/15 (41)

Job Completion



U 07.03.16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	29964
Description: Stem		Part Number:	D2968-1
Inspection Dwg: D2968 Rev: B1		Page 1 of 1	

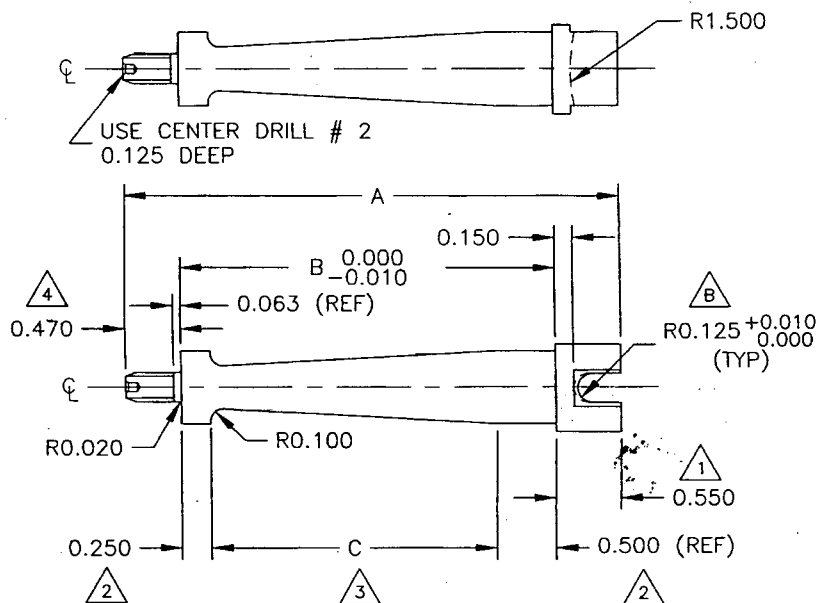
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
5.040	+/-0.010	5.038	✓			
4.020	+0.000/-0.010	4.015	✓			
3.270	+/-0.010	3.270	✓			
0.470	+/-0.010	.470	✓			
0.250	+/-0.010	.250	✓			
0.550	+/-0.010	.551	✓			
Ø0.750	+/-0.010	.748	✓			
Ø0.625	+/-0.010	.623	✓			
Ø0.363	+/-0.010	.364	✓			
0.250	+0.010/-0.000	.251"	✓			
0.625	+/-0.010	.629"	✓			
0.150	+/-0.010	.148"	✓			
0.250	+0.010/-0.000	_____				
0.625	+/-0.010	_____				
0.150	+/-0.010	_____				
1/4-28 Major dia	0.243 - 0.249	.248	✓			
R.125	+0.000 -0.000	R0.125"	✓			
MOW	0.261 - 0.267	.262	✓			

Measured by: S.B./J.F.	Audited by: J.L.	Prototype Approval:	N/A
Date: 07/01/06	Date: 0 10/03/11	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.02.25	New Issue P/O D2968-041	KJ/RF	
B	05.05.26	Dimensions added	KJ/JLM	



PART NUMBER	A	B	C
D2968-1	5.040	4.020	3.270
D2968-3	4.200	3.180	2.430

D2968-1/-3 STEM

D2968-1 AND D2968-3 STEM:

MATERIAL: AISI 4130

△ 0.750 O.D.

△ 0.625 O.D.

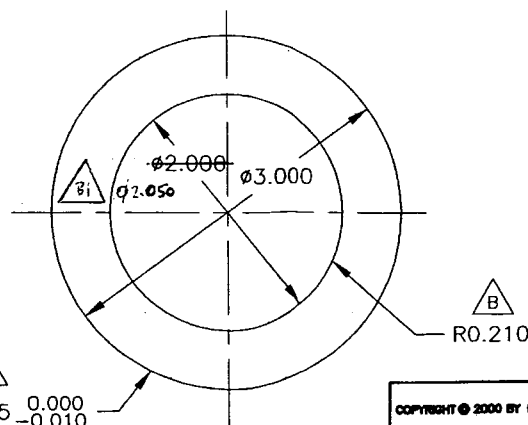
△ MACHINE UNIFORM TAPER FROM 0.363 O.D.
TO 0.625 O.D.

△ 1/4-28 UNF THREAD WITH 0.063 GRIP
MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
UNLESS OTHERWISE INDICATED
TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED

D2968-5 RING:

MATERIAL AISI 4130

TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED



D2968-5 RING

RELEASED

UNDER REVIEW

USE 2968-1 STEM
FOR -041
USE 2968-3 STEM
FOR -043

D2968-041 AND D2968-043 TOW RING:

WELD PER QSI 004 ON ALL EDGES BETWEEN STEM AND RING
HEAT TREAT TO MIN ULTIMATE TENSILE STRENGTH OF 125 KSI
FINISH: CAD PLATE ENTIRE ASSEMBLY PER

QQ-P-416F CLASS I TYPE II

POWDER COAT WHITE (REF 4.3.5.2) PER DART

QSI 005 4.3 (EXCEPT THREADS)

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

B	00.05.31	R0.125 AND R0.210 WERE 0.060 x 45°
A	00.03.07	NEW ISSUE
DESIGN	DRAWN BY	DART DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2968
DATE	00.05.31	TITLE TOW RING

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